Preferably, the STF is updated after the service migration from the home network to the visited network, in order to provide a correct routing to the service.

5

10

15

20

25

30

According to a third example of the preferred embodiment, the MSC of the visited network may be directly connected to the STF, as shown by the dotted arrow in Fig. 1.

Alternatively, the STF may be an own network element of the visited network. Thus, in the third example, the MSC may directly access the STF in order to obtain the required IN service information.

Fig. 3 shows a corresponding transmission and processing diagram of the signaling performed in the third example of the preferred embodiment.

According to Fig. 3, the MSC transmits an IN service request containing a service identifier and corresponding attributes to the STF when it has encountered a service trigger information, such as a trigger detection point specified in the CSI and indicating that an IN service is to be triggered at the visited network. In response to the received IN service request, the STF performs an IN service check based on the subscriber information contained in the IN service request. Then, the STF returns the resulting information about the suitable IN service to the MSC, which performs a processing for downloading and executing the corresponding IN service based on the received checking result. This may be achieved in the GSM by transmitting an Initial Detection Point message to the corresponding CSE.

. . . . / 1905

- 17 -

According to a fourth example, the MSC may transmit an Initial Detection Point message directly to the STF, after having encountered the service trigger information. In this case, the Initial DP message contains the service identifier and corresponding attributes. Based on this information, the STF transmits a corresponding Initial DP message specifying the service location information of the triggered service to the corresponding CSE.

10 When a home network service controller (i.e. home CSE)
performs downloading of a service logic (with home SCF
address and service key) to a visited network service
controller (i.e. visited CSE), the visited network
controller adds a translation entry (home SCF address,
15 service key) to the visited SCF address. Thus, the STF may
obtain the visited network service controller address (i.e.
visited SCF address) from the visited network service
controller based on the home network service controller
address (i.e. home SCF address) and the home network
service key (i.e. home SCF service key).

When the MSC then transmits an Initial DP message containing the home SCF address and the home network service key to the STF, in case of an encountered service trigger information, the STF is able to translate the home SCF address and the service key into the visited SCF address. Then, the STF corrects the destination address of an Initial DP message into the obtained visited SCF address and forwards the corrected Initial DP message to the concerned visited network service controller. Optionally, the home network service key may also be encapsulated within the forwarded Initial DP message. Based on the

10

15

20

25

30

received home network service controller address and home network service key, the visited network service controller may then perform an enquiry to the home network service controller in order to obtain the required service information from the home network service controller.

The STF may be arranged to understand only SCCP (Signaling Connection Control Part) level signaling used to set-up, manage and tear down connections as well as to exchange non-connection associated information, and to recognize an Initial Detection Point message. Preferably, all INAP (Intelligent Network Application Profile) signaling or just Initial DP (Detection Point) messages to a given network or set of networks should be routed via a given STF which also acts as an SCCP level relay. The Initial DP message refers to a message by means of which a service logic is invoked for the first time in a call or session.

According to the preferred embodiment, the STF may also be checked for voice services, when there is a need to connect the MS to an announcement or a voice application. This may be the case if a voice or announcement service has migrated to another network, i.e. to a network node which may be accessed more easily from the visited network. The voice and/or announcement services can be identified by using an application identifier or describing attributes.

In particular, the signaling may be performed such that the MSC transmits an Initial Detection Point message to the corresponding service controller (i.e. CSE), after it has encountered a service trigger information such as a trigger detection point. The CSE then transmits a service request